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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,715	07/21/2003	Hiroshi Kasahara	Q75844	2935

7590 10/05/2004

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EXAMINER

MIGGINS, MICHAEL C

ART UNIT PAPER NUMBER

1772

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/622,715

Applicant(s)

KASAHARA, HIROSHI

Examiner

Michael C. Miggins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/744,438.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07212003
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 contains the limitation "from the group comprising" which is indefinite because it can include any compound because the term "comprising" is open language. It is respectfully suggested that applicant revise the claim to read - - from the group consisting - - in order to conform to standard Markush group language.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikenoya et al. (U.S. Patent No. 5,732,825, cited in the IDS of 7/21/2003) in view of Ito et al. (EP 0 721 975 A1, cited in the IDS of 7/21/2003).

Ikenoya et al. teach a paper container (laminate, see abstract) with gas barrier properties (since Ikenoya et al. teach a paper layer (13 from Fig. 2, column 1, lines 18-29) and a metal foil gas barrier layer (16 from Fig. 2, column 1, lines 18-29 and column 6, lines 1-5) said paper container consisting of a laminate with gas barrier properties (since Ikenoya et al. teach a gas barrier layer (16 from Fig. 2, column 1, lines 18-29)) that has at least a (I) paper layer (13 from Fig. 2, column 1, lines 18-29), a (II) gas barrier layer (16 from Fig. 2, column 1, lines 18-29), and an (III) epoxy-group-containing resin layer (14 from Fig. 2, column 1, lines 18-29) (since Ikenoya et al. specifically states that layer 14 from Fig. 2 can be an epoxy resin (see column 14, lines 19-30)), wherein said (II) gas barrier layer is adjacent to said (III) epoxy-group-containing resin layer (since Ikenoya et al. show that gas barrier layer (16 from Fig. 2) is adjacent epoxy resin layer (14 from Fig. 2)) (applies to instant claims 1-2).

Ikenoya et al. also teach a structure in which a (IV) synthetic resin layer which is a linear low-density polyethylene (21 from Fig. 2 and column 5, lines 12-16) and that the container has a (VI) heat sealing layer (20 from Fig. 2, column 4, line 52 through column 5, line 24) (applies to instant claims 8-9 and 11).

Ikenoya et al. disclose applicant's invention substantially as claimed. However, Ikenoya et al. fail to teach that the epoxy-group-containing resin composition layer includes a polyolefin (a) having a melt flow rate of 0.1 ~ 100 g/10 min. and an epoxy-compound (b) having two or more epoxy groups in the molecule and a molecular weight of 3000 or less, epoxy compound (b) being

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added in the amount of 0.01 ~ 5 parts by weight with respect to 100 parts by weight of polyolefin (a), wherein said polyolefin (a) is a non-polar polyolefin, characterized in that said epoxy-compound (b) is an epoxidized plant oil, wherein said epoxy group containing resin composition further contains an olefin polymer (c) having functional groups that react with epoxy groups and is 30 wt.% or less, wherein (c) is an ethylene-maleic anhydride copolymer or an ethylene-maleic anhydride-meth(acrylate) copolymer, and wherein said laminate also has a (V) impact-resistant resin layer and wherein the epoxy-group containing resin is laminated to the gas barriers surface which was not treated with an anchor coat agent.

Ito et al. teach an epoxy-group-containing resin composition layer includes a polyolefin (a) having a melt flow rate of 0.1 ~ 100 g/10 min. and an epoxy-compound (b) having two or more epoxy groups in the molecule and a molecular weight of 3000 or less, epoxy compound (b) being added in the amount of 0.01 ~ 5 parts by weight with respect to 100 parts by weight of polyolefin (a) (see abstract) wherein said polyolefin (a) is a non-polar polyolefin (page 3, lines 30-35), characterized in that said epoxy-compound (b) is an epoxidized plant oil (page 4, line 57 through page 5, line 12), wherein said epoxy group containing resin composition further contains an olefin polymer (c) having functional groups that react with epoxy groups and is 30 wt.% or less (page 4, lines 35-47), wherein (c) is an ethylene-maleic anhydride copolymer or an ethylene-maleic anhydride-meth(acrylate) copolymer (page 4, lines 35-47), and wherein said laminate also has a (V) impact-resistant resin layer (see page 2, lines 5-11, since

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polyester and polyamide are among the compounds listed by applicant as impact resistant layers in the instant specification, page 24 and Ito et al. specifically recite polyester and polyamide as a substrate layer for the epoxy resin see page 3, lines 8-26) and wherein the epoxy-group containing resin is laminated to the gas barrier surface which was not treated with an anchor coat agent (since the epoxy-group containing resin is bonded directly to a substrate, page 3, lines 20-25, and the substrate can be aluminum foil, see page 5, lines 47, which is a gas barrier) (applies to instant claims 1, 3-7 and 10) in a laminate (page 2, lines 5-11) for the purpose of providing improved adhesive properties, high draw-down properties and excellent calendaring (page 2, lines 1-11).

Therefore it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to have provided that the epoxy-group-containing resin composition layer includes a polyolefin (a) having a melt flow rate of 0.1 ~ 100 g/10 min. and an epoxy-compound (b) having two or more epoxy groups in the molecule and a molecular weight of 3000 or less, epoxy compound (b) being added in the amount of 0.01 ~ 5 parts by weight with respect to 100 parts by weight of polyolefin (a), wherein said polyolefin (a) is a non-polar polyolefin, characterized in that said epoxy-compound (b) is an epoxidized plant oil, wherein said epoxy group containing resin composition further contains an olefin polymer (c) having functional groups that react with epoxy groups and is 30 wt. % or less, wherein (c) is an ethylene-maleic anhydride copolymer or an ethylene-maleic anhydride-meth(acrylate) copolymer, and wherein said laminate also has a (V) impact-resistant resin layer and wherein the epoxy-group

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containing resin is laminated to the gas barriers surface which was not treated with an anchor coat agent in the paper laminate of Ikenoya et al. in order to provide improved adhesive properties, high draw-down properties and excellent calendaring as taught or suggested by Ito et al..

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (571) 272-1494. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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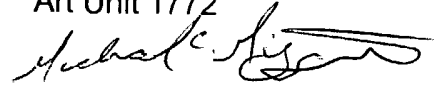
MCM

September 30, 2004

Michael C. Miggins

Examiner

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A handwritten signature in black ink, appearing to read "Michael C. Miggins", written over the printed name and title.